WHAT IS CLAIMED IS:

1. An interference resistant infrared extension system comprising:

one or more infrared photodetectors configured to detect impinging infrared light having a signal frequency modulated by data;

an amplifier in electrical communication with said one or more IR photodetectors, wherein said amplifier is tuned to amplify electrical signals generated by said one or more IR photodetectors;

one or more infrared light emitters in electrical communication with said amplifier, wherein in said one or more infrared light emitters are configured to emit infrared light in response to electrical signals from said amplifier; and

an infrared bandpass filter configured to filter light impinging on said one or more IR photodetectors, wherein said bandpass filter is configured to have a center wavelength falling within the range of about 920nm to about 980nm; an 80 percent bandwidth no less than about 10nm; and a 50 percent bandwidth no less than about 20nm.

2. The interference resistant infrared extension system of claim 1, wherein said 50 percent bandwidth of said infrared bandpass filter encompasses the about 940nm to about 960nm wavelength range.

3. The interference resistant infrared extension system of claim 1, wherein said amplifier is configured to respond to one or more of the following signal frequencies 32KHz, 40KHz, and 56KHz.

4. An interference resistant infrared receiver, comprising:

(a) at least one infrared photodetector configured to detect impinging infrared light of a desired wavelength;

(b) an amplifier, coupled to the at least one infrared photodetector, for amplifying an electrical signal generated by the at least one infrared photodetector;

(c) a bandpass filter, coupled to the at least one infrared photodetector; and

(d) at least one infrared light emitter, coupled to the amplifier, for emitting a signal in response to an electrical signal generated by the at least one infrared photodetector,

wherein the desired impinging infrared light passes through the bandpass filter before impinging on the at least one infrared photodetector, wherein the bandpass filter is configured to pass desired impinging infrared light and block undesired impinging wavelengths of light.

5. The infrared receiver of claim 4, wherein more than one infrared photodetector is used to increase the sensitivity of the receiver to the impinging infrared light.

6. The infrared receiver of claim 5, wherein a sensitivity of the amplifier is increased such that the sensitivity of the receiver is increased with respect to the impinging infrared light.

7. The infrared receiver of claim 6, wherein the bandpass filter passes light falling within a wavelength range of about 920nm to about 980nm.

8. The infrared receiver of claim 7, wherein the bandpass filter has an 80 percent bandwidth no less than about 10nm wide.

9. The infrared receiver of claim 8, wherein the bandpass filter has a 50 percent bandwidth no less than about 20nm wide.

10. The infrared receiver of claim 9, wherein the amplifier further comprises an automatic gain control circuit for accepting impinging infrared light of different intensities and generating electrical signals of substantially similar signal strengths therefrom.

11. The infrared receiver of claim 10, wherein a first infrared light emitter emits light of a first wavelength and a second infrared light emitter emits light of a second wavelength.

12. An interference resistant communication system, comprising:

a detector for receiving an optical communication signal;

an amplifier, coupled to the detector, for amplifying an electrical signal generated by the detector;

a filter, coupled to the detector, for permitting the optical communication signal to substantially pass through the filter while substantially preventing interfering signals from reaching the detector; and

a light emitter, coupled to the amplifier, for emitting a signal in response to an electrical signal generated by the detector.

13. The interference resistant communication system of claim 12, wherein the detector comprises at least one photodetector.

14. The interference resistant communication system of claim 13, wherein the filter is a bandpass filter.

15. The interference resistant communication system of claim 14, wherein the filter further comprises an electromagnetic interference screen.

16. The interference resistant communication system of claim 15, wherein the optical communication signal is transmitted as an infrared signal.

17. A method for communicating, comprising:

detecting an electromagnetic communication signal;

converting the electromagnetic communication signal to an electrical signal;

amplifying the electrical signal;

filtering the electromagnetic communication signal prior to detecting the electromagnetic communication signal;

emitting an electromagnetic signal in response and corresponding to the electrical signal, wherein a desired optical communication signal is substantially converted to an electrical signal while interfering signals are substantially prevented from being converted to an electrical signal.

18. The method of claim 17, wherein detecting the electromagnetic communication signal is performed using a plurality of detectors, the plurality of detector being used to increase sensitivity.

19. The method of claim 17, wherein amplifying the electrical signal is performed using an amplifier with increased sensitivity.